

# Long-Term Energy Scenarios (LTES) for developing national energy transition plans in Asia.

Webinar series

[Scenario for Developed Indonesia 2045]

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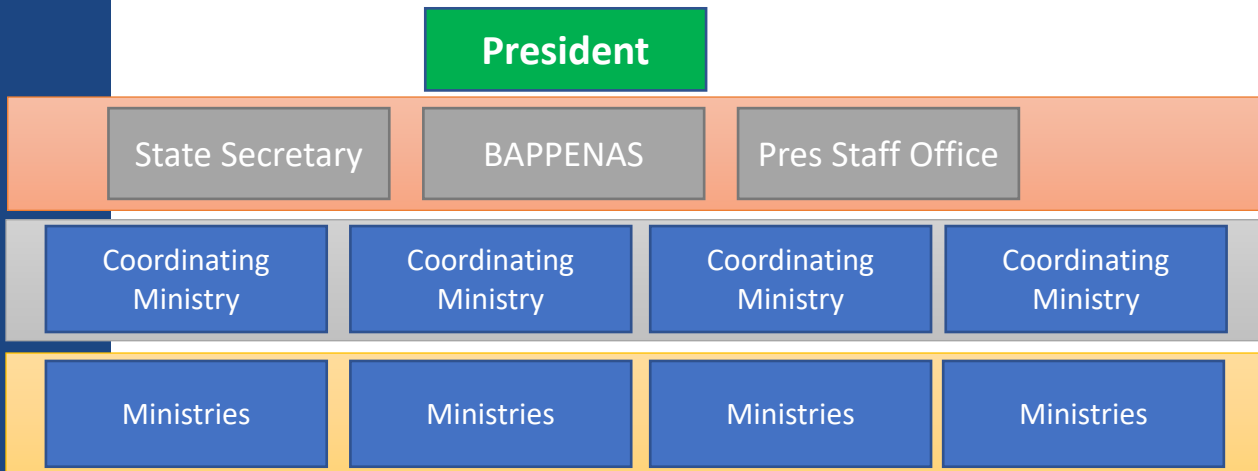
[9 Aug 2023]



Ministry of National  
Development Planning/Bappenas  
Republic of Indonesia

# National Development Planning Formulation

## Organization Structure



## Scope

1. National Long-term Development Planning/RPJPN (20 year; **Law**)
2. National Medium-term Development Planning/RPJMN (5 year; **Presidential Regulation**)
3. Government Working Plan/RKP (annually; **Presidential Regulation**)
4. Ministerial Strategic Plan
5. Ministerial Working Plan

**Existing:**

- a. RPJPN 2005-2025 (UU 17 tahun 2017)
- b. RPJMN 2020-2024 (Perpres 18 tahun 2020)

## Planning Approaches



**Politic Process**



**Participative Process**

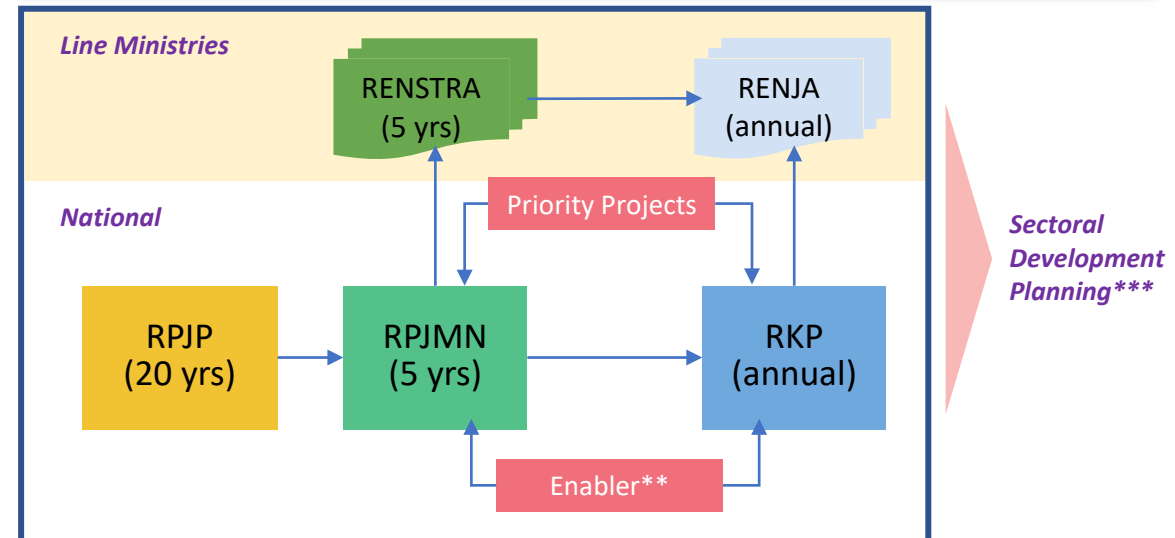


**Technocratic Process**



**Bottom-Up and Top-Down**

## INTERLINKAGES – PLANNING DOCUMENTS



\* National level; \*\* Regulation, institutions, funding, & investment; \*\*\* Grand design, masterplan, roadmap, etc

# Framework: Cascading Long Term Electricity Development

1 Use of scenarios

Vision 2045: Nusantara Sovereign, Developed, & Sustainable

Objectives



Pertumbuhan Ekonomi Hijau (Green Economy)



Pemerataan Pembangunan (Just/Equitable Development)

Initiatives

Economy

Carbon Emission

Region (Eastern)

Social

Pembangunan Tenaga Listrik (*Electricity of Things/EoT*)

QUALITY

- Security: adequacy; recovery
- Reliability: frequency; voltage; outages

SUSTAINABILITY

- Low Carbon
- Productivity: efficiency, intensity

EQUITY / JUST

- Affordable
- Universal

Pillar (PRIORITY)

Public Services and Investment

Regulatory – Institution – Funding/Financing

1 Infrastructure

2 Enabler

3 Industry & Technology

4 Funding/Finance

5 Governance

PIPELINE OF TECHNOLOGY CHOICES  
(B/ESS, G-H2, Interconnection, Smart Grid, EV, Nuclear)

INNOVATION, HUMAN RESOURCES

SUPPORTING INDUSTRY

INCENTIVE, TARIFF, PRICING, MECHANISM

INSTITUTION, REGULATORY

RISK MANAGEMENT

PUBLIC COMM

DATABASE

IMPLEMENTING/ SOURCES\*

GOVERNMENT

SOEs

PRIVATE

OTHERS

STAGING

2020-2024

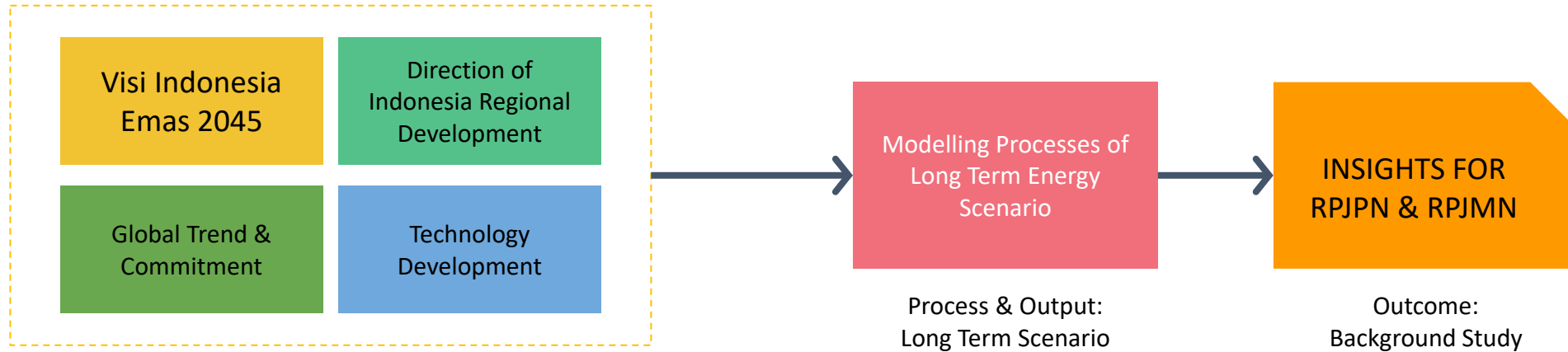
I: 2025-2029

II: 2030-2034

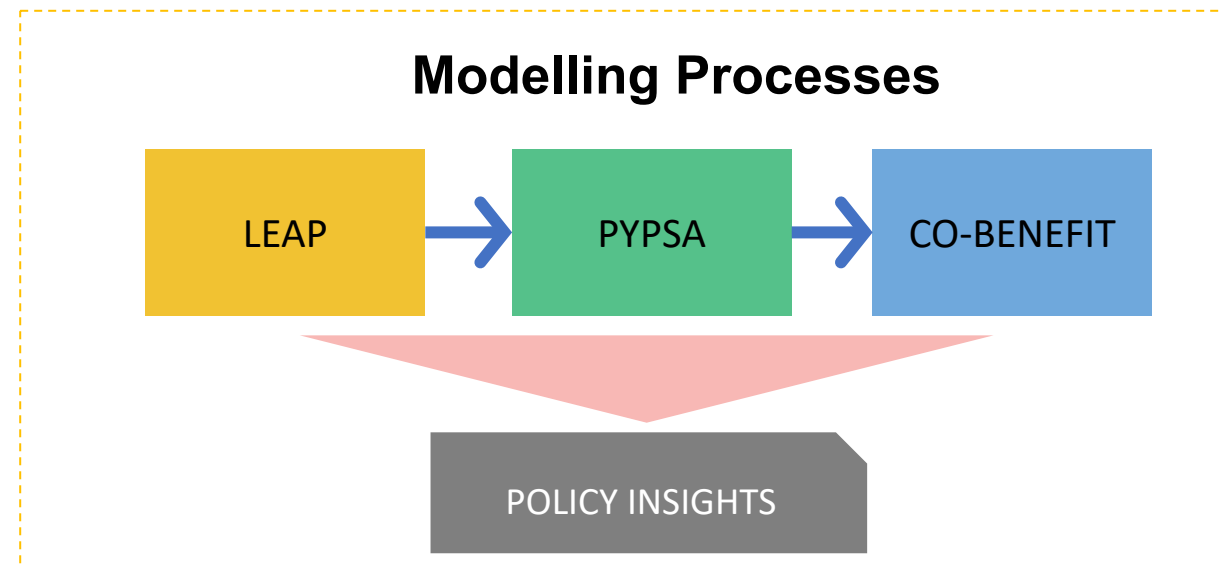
III: 2035-2039

II: 2040-2045

# Scenario for Developed Indonesia 2045 (Indonesia Emas 2045)



- The Scenario is a modelling exercise to support **Visi Indonesia Emas 2045** and National & Regional Development Agendas.
- The exercise also attempting to align these national ambitions with global trend and commitment.
- The Scenario is aiming to support the development of Long-term Development Planning (RPJPN) dan Midterm Development Planning (RPJMN).

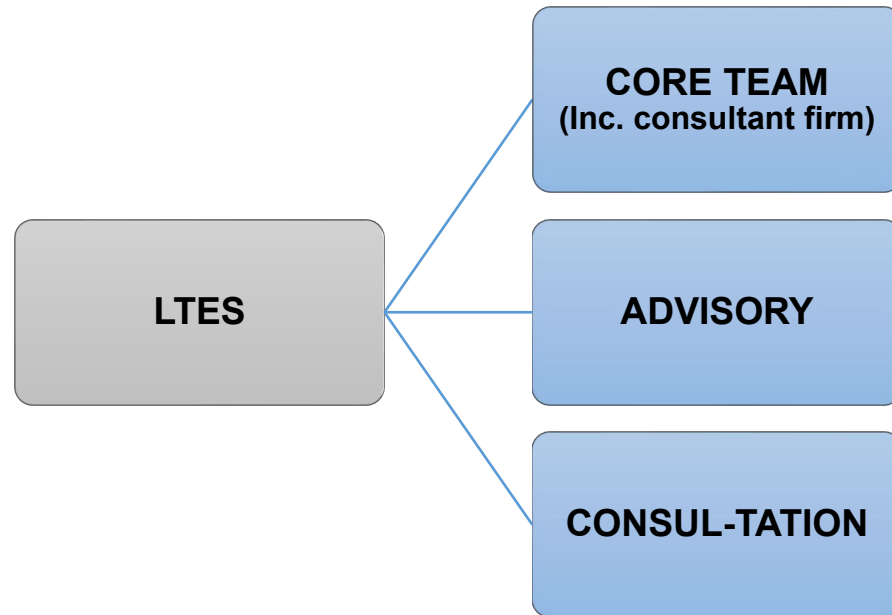


# Scenario for Developed Indonesia 2045 (Indonesia Emas 2045)

2

Development of scenarios

## 1. FOCUS GROUP DISCUSSIONS



## 2. PUBLIC CONSULTATIONS – EMERGING TECH DIALOGUES

The Kick-Off	The Role of Energy Storage	H2 for Cofiring & Isolated
<b>Apr</b>	<b>June</b>	<b>Aug</b>
	 The Role of Grid Interconnection	 Bio-Energy

## 3. INDONESIA SUSTAINABLE WEEK (ISEW) 2023

<https://isew.energy-transition.id/>

# Sustaining the knowledge

## 1. KNOWLEDGE TRANSFER

- Training for Indonesian human resources (planned)
- Alliance of universities (under discussion)

## 2. MODELLING DEVELOPMENT (under discussion)

- Building/developing Indonesian model based on “open source applications”

Thank you for your attention



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